SECTION 403
TRAFFIC-BOUND SURFACE COURSE

403.01. DESCRIPTION.

This work shall consist of constructing a surface course composed of hard, durable particles of sand, gravel, mine chats, crushed stone, or disintegrated granite of the type shown on the Plans or in the Proposal; it shall be constructed on the prepared subgrade in accordance with these Specifications and in reasonably close conformity with the lines, grades, and typical cross sections shown on the Plans or established by the Engineer.

403.02. MATERIALS.

Materials shall meet the requirements specified in Subsection 703.03.

403.04. CONSTRUCTION METHODS.

(a) **Preparation of Subgrade.** Prior to placing the surfacing material on the roadbed, complete the subgrade using these requirements:

- Method A of Section 310 (Subgrade) of these Specifications for types A, B, and D.
- Method B of Section 310 (Subgrade) for type C.

(b) **Hauling and Placing.** Transport and deliver the surfacing material in approved vehicles, depositing the material in windrows on the shoulders on the same day the material is hauled. Maintain uniform distribution throughout the length of each station, unless other methods are approved by the Engineer.

(c) **Shaping and Maintenance.** When material is placed in driveways and incidental areas adjacent to the roadway, properly shape and compact it in a manner approved by the Engineer.

Correct any holes, waves, and undulations by blading them and then adding more material from the windrow. Continue the shaping of the surface material until it is well compacted, free from ruts, waves, and undulations, conforms to the cross section shown on the Plans, and receives final acceptance.

Remove excess material not required for maintenance, and stockpile it at a place approved by the Engineer.

(d) **Traffic Control.** The road shall not be closed to traffic during this construction work; therefore, carry on the operations so as to interfere as little as possible with the movement of traffic. Maintain sufficient warning signs and lights as required to safeguard against accidents. Do not leave windrows or piles of material on the traveled roadway overnight; instead, place the material on the shoulders.

403.05. METHOD OF MEASUREMENT.

Traffic-bound surface course will be measured by the ton (metric ton). All weight of moisture in excess of 5 percent oven-dry weight will be deducted from the pay quantity.

403.06. BASIS OF PAYMENT.

Accepted quantities of traffic-bound surface course, measured as provided above, will be paid for at the contract unit price as follows:

(A)	TRAFFIC BOUND SURFACE COURSE TYPE A	TON (METRIC TON)
(B)	TRAFFIC BOUND SURFACE COURSE TYPE B	TON (METRIC TON)
(C)	TRAFFIC BOUND SURFACE COURSE TYPE C	TON (METRIC TON)
(D)	TRAFFIC BOUND SURFACE COURSE TYPE D	TON (METRIC TON)
(E)	TRAFFIC BOUND SURFACE COURSE TYPE E	TON (METRIC TON)
(F)	TRAFFIC BOUND SURFACE COURSE TYPE F	TON (METRIC TON)

Such payment shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

SECTION 406
OPEN-GRADED FRICTION SURFACE COURSE

406.01. DESCRIPTION.

This work shall consist of mixing, in a central plant, aggregate and bituminous materials, and then spreading and compacting the mixed material on a prepared roadbed, all in substantial compliance with the Specifications and dimensions shown on the Plans.

406.02. MATERIALS.

Materials shall meet the requirements of Section 708.

406.03 . EQUIPMENT.

Equipment shall conform to the requirements of Subsection 411.03.

406.04. CONSTRUCTION METHODS.

(a) **Stockpiling Materials.** Aggregate stockpiles shall meet the requirements of Subsection 106.09.

(b) **Preparation of Materials.** Dry and heat the mineral aggregate to a temperature not to exceed 260°F (127˚C); however, when Polymer Modified Asphalt Cement (PMAC) is specified, dry and heat the mineral aggregate to a temperature not to exceed 350°F (177˚C). Collect dust resulting from this operation and either waste it or return it to the mixture as deemed necessary.

The mineral aggregate shall be free of oily or carbonaceous coatings prior to entering the mixer.

Bituminous materials shall not exceed 280°F (138˚ C) when introduced into the mixer; however, when PMAC is specified, the temperature of the PMAC shall not exceed 350°F (177˚ C) when it is introduced into the mixer.

(c) **Mixing.** Mix the aggregate and bituminous material as specified in Subsection 411.04.

(d) **Loading and Hauling.** Coordinate loading and hauling of the mixture with the laydown operations so that the mixture shall be placed within the temperature range established in Subsection 406.04(g) and so that there will not be separation of the asphalt and aggregate.